

**UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

STINGRAY IP SOLUTIONS, LLC,

Plaintiff,

v.

LEGRAND, LEGRAND FRANCE,
BTICINO SPA, AND LEGRAND SNC,

Defendants.

The Honorable Rodney Gilstrap

Case No.: 2:21-cv-00201-JRG
(Lead Case)

Case No.: 2:21-cv-00202-JRG
(Lead Case)

STINGRAY IP SOLUTIONS, LLC,

Plaintiff,

v.

AMAZON.COM, INC. and AMAZON.COM
SERVICES LLC,

Defendants.

Case No.: 2:21-cv-00193-JRG
(Member Case)

Case No.: 2:21-cv-00194-JRG
(Member Case)

DEFENDANTS' RESPONSIVE CLAIM CONSTRUCTION BRIEF

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I. INTRODUCTION

Plaintiff (“Stingray”) asserts eight patents against Defendants (“Amazon”). The parties dispute the construction of six terms from five of these patents. While Amazon’s constructions reflect the plain and ordinary meanings of the disputed claim terms and are consistent with the intrinsic record’s use of the terms, Stingray asks the Court to read out of each claim their essential characteristics and adopt constructions that are fundamentally at odds with the terms’ plain and ordinary meanings—all contrary to the well-established claim construction canons.

II. THE ASSERTED PATENTS

The parties dispute the constructions of claim terms recited in five asserted patents.¹ The claims of four of these patents—the ’310, ’426, ’117, and ’961 patents—are directed to mobile ad hoc networks (“MANETs”). (Declaration of Dr. Kevin Jeffay at ¶ 29 (“Jeffay Decl.”).) A mobile ad hoc network is “a network, including a number of geographically distributed mobile nodes wirelessly connected by one or more radio frequency channels, which lacks fixed infrastructure such that the nodes must self-organize and reconfigure as they move, join, or leave the network.” (Dkt. No 74, Stingray Opening Claim Construction Brief (“Op. Br.”) at 6.) The mobile nodes are mobile devices like laptops, PDAs, and cell phones that form the MANET on the fly and continuously redefine the network’s topology as the nodes move. (’961 patent, 5:9-12.) This unique network differs from traditional wireless networks, like cellular or WiFi networks, which rely on a centralized access point (e.g., a router or base station) in charge of routing messages from source devices to destination devices in the network. (’310 patent, 1:6-18.) The MANET is decentralized, meaning that the mobile nodes in the network must communicate between

¹ U.S. Patent Nos. 6,958,986 (the “’986 patent”), 6,961,310 (the “’310 patent”), 7,027,426 (the “’426 patent”), 7,082,117 (the “’117 patent”), and 7,616,961 (“the ’961 patent”).

themselves to create paths for routing messages in the network. (*Id.* at 1:31-33.) Figure 1 of the '310 patent, reproduced below, provides a helpful example of a MANET.

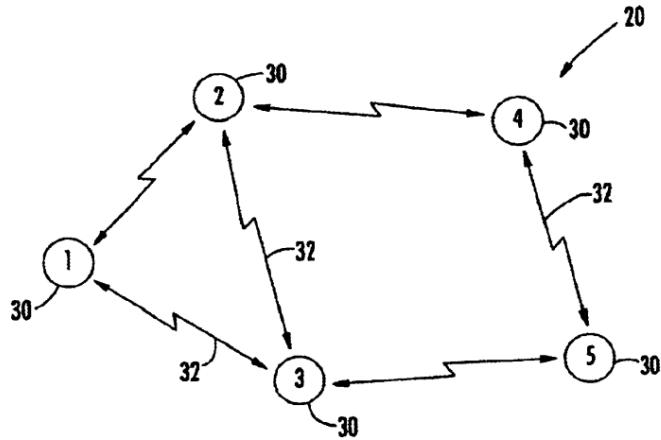


FIG. 1

(*Id.*, FIG. 1.) The MANET 20 is formed by the mobile nodes 30. Each mobile node communicates directly with another mobile node attached to the same communication link 32 (e.g., mobile node 1 communicates directly with mobile node 2). For two nodes to communicate that are not attached to the same communication link (e.g., mobile nodes 1 and 4), they must identify the available routes through intermediate mobile nodes (e.g., the route from nodes 1-2-4 or nodes 1-3-5-4) and then select the best route based on quality of service parameters, such as selecting the route with the most available bandwidth or lowest number of intermediate nodes (i.e., lowest hop count). (*Id.* at 2:12-22.)

Mobile ad hoc networks were developed primarily for military or disaster relief situations where a centralized infrastructure of traditional networks is unreliable or unavailable. ('961 patent, 1:24-28.) MANETs, however, have certain limitations inherent to their dynamic nature and the frequent changes in network topology. The '310, '426, '117, and '961 patents each identify problems in mobile ad hoc networks and purport to solve these problems.

The '310 patent, entitled "Multiple path reactive routing in a mobile ad hoc network," explains that prior art mobile ad hoc networks receive and rank routes between source and destination nodes based on link metrics, like shortest route path, and then use the single highest-ranked path to transmit the message to the destination node. ('310 patent, 1:66-2:4, 2:42-46.) The patent notes that this prior art method can lead to transmission delays because the message can overload the single route's bandwidth. (*Id.* at 2:42-50.) To purportedly solve this problem, the patent proposes using the same prior art method to determine the available routes between source and destination nodes and then using multiple routes (instead of a single route) to either send the same duplicated message to the destination node or send portions of the single original message to the destination node. (*Id.* at 2:53-3:3.)

The '426 patent, entitled "Multi-Channel Mobile Ad Hoc Network," states that prior art MANETs had limited bandwidth, in part because the mobile nodes communicated on a single radio frequency channel. ('426 patent, 1:36-40, 2:29-36.) The '426 patent's purported solution is to enable mobile nodes in the MANET to communicate over multiple channels that transmit data over different radio frequencies, to which it refers as "electrically separate channels." (*Id.* at 2:44-47, claim 18.)

The '117 patent, titled "Mobile Ad-Hoc Network with Intrusion Detection Features and Related Methods," contends that "since nodes in a mobile ad-hoc network all communicate wirelessly, there is a much greater risk of intrusion by unauthorized users." ('117 patent, 1:53-57.) The patent proposes an intrusion detection technique where a policing node detects intrusions into the network. (*Id.* at 2:34-35.) A given mobile (leader) node in the MANET sets a "contention period" in which all network nodes must "contend for" or request access to the communication channel or a "contention-free period" where instead of the nodes contending for access, a single "designated control" node controls channel access for all other nodes in the network. (*Id.* at

7:6-14.) Thus, if a node operates in a “contention-free” mode during a “contention period,” the policing node determines the node is an intruder to the network and alerts the rest of the network nodes. (*Id.* at 7:18-27.)

The ’961 patent is titled “Allocating Channels in a Mobile Ad Hoc Network” and explains that in prior art MANETs, each mobile node monitors and shares traffic, route, and connectivity information to every other node in the MANET. (’961 patent, 2:43-48.) The patent proposes that each mobile node in a MANET monitor its communication channels to see if a channel meets a “QoS threshold” that the patent does not define. (*Id.* at 2:58-61.) If the channel performance falls below a designated QoS threshold, the mobile node scouts one or more other available channels by broadcasting messages to other mobile nodes, inquiring about the performance of their links and processing the replies to identify alternative channels. (*Id.* at 2:61-67.)

While the claims of the fifth asserted patent, the ’986 patent, do not recite mobile ad hoc networks, the patent’s specification makes clear that the purported invention is intended to address a problem common in those specific networks caused by mobile nodes continuously entering into and dropping out of a network. The ’986 patent discloses a method for scheduling time slots for communications between mobile nodes in mobile ad hoc networks. (’986 patent, 2:24-28.)

III. THE DISPUTED CLAIM TERMS AND PHRASES

A. “mobile ad hoc network”

| Amazon Construction | Stingray Construction |
|------------------------|----------------------------|
| Preambles are limiting | Preambles are not limiting |

The term “mobile ad hoc network” appears in the asserted claims of the ’310, ’426, ’117, and ’961 patent. The parties have agreed that this term shall be construed as “a network, including a number of geographically distributed mobile nodes wirelessly connected by one or more radio frequency channels, which lacks fixed infrastructure such that the nodes must self-organize and

reconfigure as they move, join, or leave the network.” The parties dispute, however, whether that term is part of limiting preambles in claim 13 of the ’310 patent, claims 8 and 18 of the ’426 patent, claims 24 and 55 of the ’117 patent, and claim 1 of the ’961 patent. The preambles recite essential structures “necessary to give life, meaning, and vitality” to the claims and capture what the inventors “actually invented and intended to encompass by the claim[s],” and therefore limit the claims. *Catalina Mktg. Int’l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir. 2002); *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257 (Fed. Cir. 1989).

1. **The preambles of claim 13 of the ’310 patent, claim 8 of the ’426 patent, claim 24 of the ’117 patent, and claim 1 of the ’961 patent each provide antecedent basis necessary to define and give meaning to the claim.**

The preambles of these claims are limiting because they provide antecedent basis and are essential to understand the claim body. *Bell Commc’ns Rsch., Inc. v. Vitalink Commc’ns Corp.*, 55 F.3d 615, 620 (Fed. Cir. 1995) (“[W]hen the claim drafter chooses to use both the preamble and the body to define the subject matter of the claimed invention, the invention so defined, and not some other, is the one the patent protects.”) (original emphasis omitted).

For claim 13 of the ’310 patent, the preamble recites:

A method for routing **message data** from **a source node to a destination node in a mobile ad hoc network** comprising **a plurality of intermediate mobile nodes** between the source node and the destination node, and **a plurality of wireless communication links connecting the nodes together**, the method comprising:

(’310 patent, claim 13 (emphasis added).) It provides antecedent basis for multiple terms used later in the body of the claim, which recites “**the source node**” discovering and ranking discovered routes to “**the destination node** in a mobile ad hoc network” and “simultaneously distributing **the message data** to the destination node along a plurality of discovered routes.” (*Id.* (emphasis added).)

The preamble of claim 13 also breathes “life, meaning, and vitality” to the claim because the claim body “can only be understood in the context of the preamble.” *Pitney Bowes, Inc. v.*

Hewlett-Packard Co., 182 F.3d 1298, 1306 (Fed. Cir. 1999). The preamble states that the method for routing message data from a source node to a destination node is performed in a specific type of network—“a mobile ad hoc network comprising a plurality of intermediate mobile nodes between the source node and the destination node.” (’310 patent, claim 13.) The mobile ad hoc network, with intermediate nodes between the source node and the destination node, provides the necessary structure for “***simultaneously*** distributing the message data to the destination node [of the mobile ad hoc network] ***along a plurality of discovered routes.***” (*Id.* (emphasis added).) Without the preamble, the claim body would lose its meaning. The claim would recite “the source node” distributing “the message data to the destination node” but it would be silent as to what comprises the “plurality of discovered routes” between the source and destination nodes which are discovered, ranked, and “simultaneously” used for distribution. Only the claim preamble provides that information. It informs the reader that “the plurality of discovered routes” are routes in a mobile ad hoc network comprising a plurality of intermediate nodes and a plurality of communication links connecting the nodes together.

The preamble of claim 8 of the ’426 patent is also limiting because it provides antecedent basis for the claim body and essential information to understand the claim. The preamble of claim 8 states:

A method for operating a mobile ad hoc network comprising a plurality of wireless mobile nodes and a plurality of wireless communication links connecting the plurality of nodes together over ***a plurality of electrically separate wireless channels***, the method comprising:

(’426 patent, claim 8 (emphasis added).) The claim body then recites “at a source node, sending a route request over ***each of the plurality of electrically separate channels*** to discover routing to a destination node” in “a mobile ad hoc network” and “at the source node, selecting a route to the destination node ***on at least one of the plurality of electrically separate channels***” in that network.

(*Id.* (emphasis added).) The preamble thus provides antecedent basis for the terms appearing in the body of the claim.

Further, the claim body can only be understood in the context of the preamble. The preamble explains that the “plurality of electrically separate channels” are the channels in a mobile ad hoc network over which “the plurality of nodes” are wirelessly connected. Without the preamble, the claim has no meaning because there is no way to know what the “electrically separate wireless channels” connect. Only the preamble explains that those channels connect the plurality of nodes in a specific network type—a MANET—and that the connections between the nodes in the MANET form the routes that are discovered and ultimately selected in the claim body.

The term “mobile ad hoc network” provides antecedent basis and essential information to understand claim 24 of the ’117 patent. The preamble recites, “[*a*] **mobile ad hoc network** (MANET) comprising.” (’117 patent, claim 24 (emphasis added).) The body of the claim later recites “a policing node for detecting intrusions **into the MANET . . .**” (*Id.* (emphasis added).)

Finally, the preamble of claim 1 of the ’961 patent provides antecedent basis and is necessary to understand the body of the claim. The preamble recites:

A method for dynamic channel allocation in a mobile ad hoc network comprising **a plurality of wireless mobile nodes** and **a plurality of wireless communication links** connecting the plurality of wireless mobile nodes together over **a plurality of separate channels at different frequencies**, the method comprising:

(’961 patent, claim 1 (emphasis added).) The body of the claim then recites “**at each node**, monitoring link performance on a first channel” in the “mobile ad hoc network” and “**at each node**, scouting one or more **other available separate channels at different frequencies** when the monitored link performance on the first channel falls below the QoS threshold.” (*Id.* (emphasis added).) The preamble, thus, provides the antecedent basis for “each node” and the “plurality of separate channels.”

Further the preamble is necessary to understand that “each node” is one of the “plurality of wireless nodes in *a mobile ad hoc network*,” and that “scouting one or more other available separate channels at different frequencies” is done among the “plurality of separate channels at different frequencies” over which the wireless nodes in the MANET are communicating, which is only recited in the preamble.

2. The preambles of claim 18 of the ’426 patent and claim 55 of the ’117 patent recite essential structure and are necessary to capture what the inventors actually invented.

The preambles of claim 18 of the ’426 patent and claim 55 of the ’117 patent should be given limiting effect because they are “necessary to give life, meaning, and vitality” to the claims and capture what the inventors actually purported to invent. *Catalina Mktg.*, 289 F.3d at 808.

In claim 18 of the ’426 patent, the preamble recites a “mobile ad hoc network comprising,” and then the body of the claim recites the component parts of the claimed mobile ad hoc network. (’426 patent, claim 18.) The claim thus requires that the component parts come together to operate as and constitute a mobile ad hoc network, which adds a limitation and is necessary to give meaning to the claim. *MEMS Tech. Berhad v. Int'l. Trade Comm'n*, 447 Fed. App'x 142, 154 (Fed. Cir. 2011) (the preamble is properly given limiting effect when it is an important characteristic of the listed components in the claim body).

Stingray wrongly asserts that the preamble of claim 18 of the ’426 patent should not be given limiting effect because it only recites “[a] mobile ad hoc network.” (Op. Br. at 9-10.) Stingray’s recitation of the preamble is incomplete. The complete preamble states, “[a] mobile ad hoc network *comprising*” and then the body of the claim recites the component nodes that comprise the claimed mobile ad hoc network. The Federal Circuit and this Court routinely find claims drafted in this form limiting if the preamble provides context essential to understanding the limitations in the claim body. *See, e.g., MEMS Tech.*, 447 Fed. App'x at 154; *Mad Dogg Athletics*,

Inc. v. Peloton Interactive, Inc., No. 2:20-CV-00382-JRG, 2021 WL 3200994, at *7 (E.D. Tex. July 28, 2021). For example, in *MEMS Tech.*, the Federal Circuit affirmed a holding that the preamble “[a] microelectromechanical system package comprising” was limiting because the “components listed in the claim body come together to form a mountable package.” *MEMS Tech.*, 447 Fed. App’x at 146, 154. It explained that “the microelectromechanical system” was an “important characteristic of the claimed invention” in light of the intrinsic record and thus must be limiting. *Id.*

The preamble of claim 18 of the ’426 patent likewise recites the essential element of the claim that comes together from the component parts in the claim body. Claim 18 recites a MANET in the preamble and then recites the component parts in the body that come together to form that MANET—“a plurality of mobile nodes,” and “each mobile node comprising a communications device to wirelessly communicate with other nodes of the plurality of nodes” and “a controller to route communications” capable of performing route discovery and selection. (’426 patent, claim 18.) These capabilities of mobile nodes wirelessly communicating and each node acting as a router are distinct characteristics of a MANET as described in the specification. (See, e.g., ’426 patent, 1:16-23 (“[T]he most distinctive feature of mobile ad hoc networks is the lack of any fixed infrastructure. The network is formed of mobile nodes only, and a network is created on the fly as the nodes transmit to or receive from other nodes.”).) Thus, the preamble is limiting because it recites an essential element of the claim comprising the end result of the recited component parts.

The preamble of claim 55 of the ’117 patent is also a limitation. The preamble recites “[a]n intrusion detection method for a mobile ad-hoc network (MANET) comprising a plurality of nodes,” and then the body of the claims refers back to the preamble by reciting “transmitting data between the plurality of nodes” and “monitoring transmission among the plurality of nodes” with a definite article for the MANET nodes. (’117 patent, claim 55.)

Stingray wrongly asserts that the preamble of claim 55 of the '117 patent only recites an “intended use of the claimed invention [by stating] that the method is ‘for a mobile ad-hoc network (MANET).’” (Op. Br. at 7.) Stingray’s recitation of the preamble is, once again, incomplete. The preamble actually states, “[a]n intrusion detection method for a mobile ad-hoc network (MANET) comprising a plurality of nodes, the method comprising.” ('117 patent, claim 55.) Stingray tellingly omits reference to the preamble terms “comprising a plurality of nodes” of the recited mobile ad hoc network, which provides antecedent basis for limitations in the claim body.

The preamble of claim 55 should also be given limiting effect because it provides the essence of the invention, not just a mere statement of “intended use.” *See Griffin v. Bertina*, 285 F.3d 1029, 1033 (Fed. Cir. 2002). In *Griffin*, the Federal Circuit affirmed that a preamble reciting “[a] method for diagnosing an increased risk of thrombosis” was limiting because the claim made clear that “[d]iagnosis is thus the essence of [the] invention.” *Id.* at 1031, 1033 (original emphases omitted). Claim 55 of the '117 patent, likewise, makes clear that “intrusion detection . . . for a mobile ad-hoc network (MANET) comprising a plurality of nodes” is the essence of the purported invention. The preamble recites “***an intrusion detection method for a mobile ad-hoc network (MANET) comprising a plurality of nodes***,” and then the body of the claim recites a series of steps for “***generating an intrusion*** alert based upon detecting contention-free mode operation outside a CFP period” by “monitoring transmission among ***the plurality of nodes***.” ('117 patent, claim 55 (emphasis added).) The essence of the invention is to provide an intrusion detection method for a MANET comprising a plurality of nodes. Without the preamble, the necessary structure of the mobile nodes forming the MANET is absent and the essence of the invention – intrusion detection in a MANET – would be removed.

3. “Mobile ad hoc networks” is a fundamental characteristic of each claim.

In addition, each preamble is limiting because it recites a “mobile ad hoc network.” A preamble is limiting if it recites a fundamental characteristic of the claimed invention. *See Vizio, Inc. v. Int’l. Trade Comm’n*, 605 F.3d 1330, 1340 (Fed. Cir. 2010). Each patent at issue is directed to purported improvements in only one specific type of network—a mobile ad hoc network. These patents never even mention another type of wireless network. Each preamble recites the essential characteristic of the purported inventions – the “mobile ad hoc network” – and therefore must be given limiting effect. *See Catalina Mktg.*, 289 F.3d at 808. Indeed, the applicant confirmed during prosecution that each disputed claim is directed to a mobile ad hoc network. (*See, e.g.*, Declaration of Geoffrey Miller (“Miller Decl.”), Ex. 1 (’310 File History, Nov. 3, 2004 Applicant Remarks) at 11-12 (STINGRAY IP_000337-338) (“Claim 13 is directed to a method for routing message data from a source node to a destination node in a mobile ad hoc network . . .”); *id.*, Ex. 2 (’426 File History, Aug. 5, 2004 Applicant Remarks) at 9 (STINGRAY IP_000891) (describing the claimed “invention” as “directed to a multichannel *mobile ad hoc network* and method to efficiently make use of a plurality of channels”); *id.*, Ex. 3 (’117 File History, Feb. 21, 2006 Applicant Remarks) at 22-23 (STINGRAY IP_001087-1088) (asserting the “present invention is directed to a mobile ad-hoc network (MANET)” and claims 24 and 55 are directed to “intrusion detection methods for MANETS”); *id.*, Ex. 4 (’961 File History, May 8, 2007 Applicant Remarks) at 12 (STINGRAY IP_002187) (“Claim 1 . . . is directed to a method for dynamic channel allocation in a mobile ad hoc network comprising a plurality of wireless mobile nodes . . .”).)

Stingray contends that one patent (the ’117 patent) is directed to other network types because the specification states, “the policing node may . . . detect intrusions into the wireless network.” (Op. Br. at 8 citing ’117 patent, 2:61-63.) Stingray is wrong. The full context of the

specification makes clear that “the wireless network” is a MANET. (’117 patent, 2:29-63 (stating that “[t]he MANET may also include a policing node for detecting intrusions into the network” and “the policing node may detect intrusions into the wireless network” (i.e., the MANET).) The term “mobile ad hoc network,” thus is an essential element of the purported inventions as described in the specification and should be given limiting effect. *Vizio*, 605 F.3d at 1340; *Gen. Elec. Co. v. Nintendo Co.*, 179 F.3d 1350, 1361-62 (Fed. Cir. 1999) (affirming that the preamble term “raster scan display device” was limiting because the specification showed that the patents were directed to solving the problem of displaying data on a raster scan display device).

Stingray asks the Court to ignore the overwhelming evidence that the term “mobile ad hoc network” is limiting but provides no basis to do so. Stingray wrongly argues that the “mobile ad hoc network” should not be given limiting effect because “each preamble uses the word ‘for.’” (Op. Br. at 7.) That is not a rule, nor is it valid analysis. The Federal Circuit has held that preamble language following the word “for” may be given limiting effect if, as here, “that language is essential to particularly point out the invention defined by the claims.” *In re Stencel*, 828 F.2d 751, 755 (Fed. Cir. 1987) (citation omitted); *see also id.* at 752 (affirming the preamble “[a] driver for setting a joint of a threaded collar” to be limiting) (emphasis added); *see also Vizio*, 605 F.3d at 1339. For example, in *Vizio*, the Federal Circuit held the claim preamble “[a] method for decoding MPEG compatible packetized program information containing program map information to provide decoded program data” limiting because the “decoding” use was “the essence or a fundamental characteristic of the claimed invention.” *Vizio*, 605 F.3d at 1340 (emphasis added). The same analysis applies here. The original applicant made clear in the claim terms, the title of each patent, the specification, and the prosecution history that addressing specific limitations of “mobile ad hoc networks” is “the essence or a fundamental characteristic of the claimed invention” recited in each claim. *Id.*

Accordingly, the preambles of claim 13 of the '310 patent, claims 8 and 18 of the '426 patent, claims 24 and 55 of the '117 patent, and claim 1 of the '961 patent, by providing antecedent basis, necessary structure, and the essential characteristic of the purported inventions, are “necessary to give life, meaning, and vitality to the claim,” and must limit each claim. *Pitney Bowes*, 182 F.3d at 1306 (internal quotation marks and citation omitted).

B. “mobile node(s)”

| Amazon Construction | Stingray Construction |
|--|---|
| a mobile device connected to a network | a device in a wireless communications network that can be moved |

The term “mobile node(s)” appears in claims 9 and 25 of the '986 patent, claim 13 of the '310 patent, claims 8 and 18 of the '426 patent, and claim 1 of the '961 patent. The claims specify that these mobile nodes are part of a network, such as the recited mobile ad hoc network.

A mobile node is a well-understood term in the field of networking. (Jeffay Decl. at ¶¶ 67, 71.) It is a device connected to a network, which is intended to be used while in motion and is operable while in motion, i.e., without being tethered to a wall outlet. (Jeffay Decl. at ¶¶ 67-71; Miller Decl., Ex. 6, (Frank Hargrave, Hargrave's Communications Dictionary) at 330 (AMZ_STNGRY10103963) (defining “mobile station” as “[a] station in the mobile service intended to be used while in motion or during stops at unspecified points”)). Stingray acknowledges that mobile nodes cannot be “wired or tethered to a fixed infrastructure.” (Op. Br. at 10.) The patents consistently describe these nodes as well-known mobile devices “such as laptop computers, personal digital assistants (PDAs) or mobile phones,” which are used while in motion. ('310 patent, 5:1-8; '426 patent, 4:63-65; '961 patent, 5:4-12; *see also* Jeffay Decl. at ¶ 69.) As the patents describe, these mobile nodes “continuously” enter and exit mobile ad hoc networks and the network topology “changes arbitrarily as the nodes move.” (*See, e.g.*, '986 patent, 9:5-11; *see*

also Jeffay Decl. at ¶ 70; '310 patent, 1:12-23; '426 patent, 1:12-23, 1:32-34, 1:43-45, 1:49-50; '961 patent, 1:12-23.) Amazon's construction reflects the plain and ordinary meaning of the term and the specification. Indeed, Stingray admits that there is "nothing . . . incorrect about Amazon's construction." (Op. Br. at 9-10.) But it raises three issues with this construction, none of which negates the fact that Amazon's construction is the plain and ordinary meaning in light of the patents' disclosures.

First, Stingray argues that Amazon's construction is unhelpful because the meaning of "mobile device" is not clear. The term mobile device, however, is not only well-understood to a POSITA, but is ubiquitous in our day to day lives. Second, Stingray argues that the mobile device must be connected to a *wireless* network and not just to any network. (Op. Br. at 9.) This is wrong because, as Stingray acknowledges, the claims themselves already specify that the networks comprising the claimed mobile nodes are "wireless." *See Intel Corp. v. Qualcomm Inc.*, 21 F.4th 801, 809-10 (Fed. Cir. 2021) (rejecting a construction that would render the word "hardware" in "hardware buffer" redundant). Third, Amazon's construction does not require a mobile device to "be always in motion," as Stingray contends. (Op. Br. at 10.) A mobile device, like "a mobile phone" referenced in the patents, is of course operational when stationary. But a mobile phone, like all mobile devices, is intended to be used while in motion. Miller Decl., Ex. 6 (Frank Hargrave, Hargrave's Communications Dictionary) at 330 (AMZ_STNGRY10103963) (defining "mobile station" as "[a] station in the mobile service intended to be used while in motion or during stops at unspecified points").) Amazon's construction correctly captures this plain and ordinary meaning.

Stingray's construction broadens "mobile nodes" beyond mobile devices—to *any* device that can connect to a wireless network and that *can* be moved. Of course, any device—even a cellular base station—can be moved, but that does not make it a "mobile device." This deviation

from the ordinary meaning is confirmed in Stingray’s infringement contentions, which identifies as “mobile nodes” inherently non-mobile devices, including a microwave oven, a doorbell, a television, a router, and a light bulb. Indeed, under Stingray’s construction any device capable of connecting to a network is a mobile device, because any such device is capable of being moved by a mail truck when shipped or from a brick and mortar store to a house upon purchase. A smart washing machine or refrigerator of course is not a mobile device as understood in the field of networking. And the definition of the adjective “mobile” in a non-technical dictionary does not change this fact. (Op. Br. at 12 (citing Merriam Webster’s Collegiate Dictionary).) Because Stingray’s construction does not comport with the plain and ordinary meaning of the term and the use of that term in the specification of the patents, it is improper and should be rejected.

C. “neighboring mobile nodes”

| Amazon Construction | Stingray Construction |
|--|---|
| Mobile nodes that directly communicate [mobile nodes are mobile devices connected to a network] | no construction required / plain and ordinary meaning |

The term “neighboring mobile nodes” appears in claim 9 of the ’986 patent. The parties dispute what it means for mobile nodes to be “neighboring.”² Amazon’s construction—that mobile nodes are *neighboring* when they *directly communicate* (in contrast to mobile nodes that must communicate indirectly through intermediate nodes)—is consistent with the term’s usage throughout the ’986 patent. Stingray instead asks the Court to enter plain meaning for “neighboring mobile nodes,” which it argues is “nodes that have locations within a proximate distance relative to each other.” (Op. Br. at 12-13.) Stingray’s purported plain meaning is wrong

² The only other dispute between the parties for this term is over the meaning of “mobile nodes,” which was addressed in Section II.B., above.

because it differs from the specification's use of the term and because it fails to identify with reasonable certainty at what distance two mobile nodes are deemed "neighboring," and therefore improperly renders the term indefinite.

The '986 patent describes "neighboring" mobile nodes as mobile nodes that directly communicate, as best understood with reference to Figure 1, reproduced below.

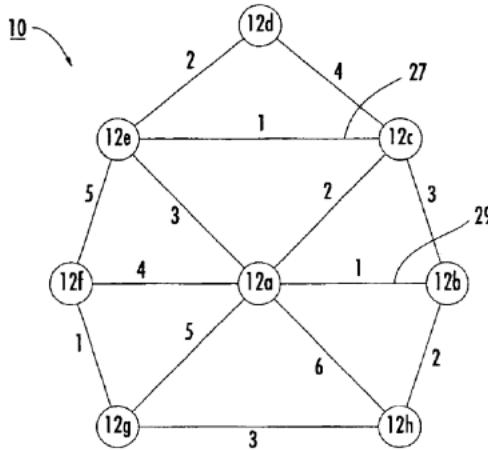


FIGURE 1

('986 patent, FIG. 1.) The figure shows a mobile ad hoc network 10 that includes mobile nodes 12a to 12h. (*Id.* at FIG. 1, 6:36-37 ("FIG. 1 is a diagram illustrating a wireless mobile ad hoc network in accordance with the present invention."), 7:44-46.) Each mobile node communicates directly with neighbor nodes to which it is directly connected via a communication link. Nodes 12a and 12b, for example, communicate directly over link 29. (*Id.* at 9:16-20 ("This is illustrated by . . . communication link 29 also operating in time slot 1 between mobile nodes 12a and 12b, as best illustrated in FIG. 1."), 9:38-45 (nodes 12a and 12b can communicate directly "without having to communicate with any other wireless mobile node").) The patent refers to these nodes that directly communicate with one another (i.e., the nodes are one hop apart) as neighboring mobile nodes, or neighbors. (*Id.* at 10:61-11:8 ("The invention is also directed to a method for establishing. . . for each mobile node . . . a communication link with a neighboring mobile node."),

14:44-48; 15:50-56 (neighbor nodes communicate directly “over the directional link”), Fig. 7.) Non-neighboring nodes (e.g., nodes 12b and 12f), in contrast, are more than one hop away, so can only communicate through one or more intermediate nodes (e.g., node 12a). (*Id.* at 14:44-48 (distinguishing a “neighbor” node from nodes “more than one hop away”), 33:44-49.) The patents therefore define “neighboring” mobile nodes as nodes that communicate directly because they are one hop apart and attached to the same communication link, consistent with the plain meaning of the term as it is used in wireless networking. (*See, e.g.*, Miller Decl., Ex. 7 (RFC 1970) at 4 (AMZ_STNGRY10103725) (“neighbor” nodes in wireless networking means “nodes attached to the same link”); *id.*, Ex. 8 (RFC 2461) at 4 (AMZ_STNGRY1013824).)

Stingray’s construction ignores the term’s usage throughout the specification and instead defines mobile nodes as “neighboring” when they are “within a proximate distance relative to each other.” (Op. Br. at 12-13.) Stingray cites no support for this attorney argument because there is none. The patent never mentions the physical distance between mobile nodes, let alone describes nodes that are “within a proximate distance” to one another as “neighboring.” Stingray’s construction is wrong for this reason alone.

Stingray’s construction also improperly renders the term indefinite and should be rejected for this reason too. *Geneva Pharms., Inc. v. GlaxoSmithKline PLC*, 349 F.3d 1373, 1384 (Fed. Cir. 2003) (rejecting proposed construction that would render a claim term indefinite). This construction fails to identify with reasonable certainty at what distance two mobile nodes are deemed “within a proximate distance relative to each other” and therefore “neighboring.” Stingray identifies no threshold distance that demarcates when two nodes are within a “proximate” distance. And to the extent Stingray contends that a mobile node is neighboring another mobile node only when it is the *closest* physical distance to the other mobile node as compared to all other mobile nodes, this would mean that each mobile node can only have one neighboring mobile node, in

contradiction to the patent’s disclosure. (’986 patent, 49:52-58 (“the initiating mobile node n will identify available time slots shared with its neighboring mobile nodes.”).) Stingray’s indefinite construction should be rejected.

Stingray’s arguments against Amazon’s construction also fail. First, Stingray argues that “neighboring mobile nodes” cannot be “mobile nodes that directly communicate” because the patent recites “establishing” communication links between “neighboring mobile nodes,” which, according to Stingray, “infers” that the “neighboring mobile nodes” could not directly communicate at the precise moment the communication links were being established. (Op. Br. at 13). This semantic argument ignores the patent’s repeated explanation that mobile nodes are “neighboring” because they directly communicate. (See, e.g., ’986 patent, 10:61-11:8, 14:44-48, 15:50-56.) The patents only describe neighboring mobile nodes as one hop apart, in contrast to mobile nodes that are not neighboring, which require multiple hops through intermediate nodes to communicate. (*Id.* at 14:44-48, 33:44-49.)

Stingray then concedes that the patent describes mobile nodes that directly communicate as *neighbor* nodes or *neighbors* but argues that *neighboring* mobile nodes means something different: a “potential neighbor node,” which is just the neighbor node before the communication link is established. (Op. Br. at 14.) As an initial matter, this argument eviscerates Stingray’s proposal of no construction for this term. Here, Stingray no longer contends that the plain meaning is mobile nodes that are a “proximate distance” apart, and instead argues that the patent defines the term as “a potential neighbor node.” (*Id.* (Stingray argues that “a ‘neighboring mobile node’ is a ‘potential neighbor node’”)). This new argument is also wrong. The patent uses “neighboring mobile nodes” interchangeably with “neighboring nodes” and “neighbors.” (See, e.g., ’986 patent, 10:61-11:8, 14:44-50, 15:50-56.) And a potential neighbor node is just a node that is potentially able to directly communicate over a communication link. (See, e.g., *id.* at 15:33-35.)

Stingray's final argument fails for a similar reason. Stingray argues that it is unclear what communications qualify as "direct" communication between nodes because the patent describes the nodes as capable of two types of communication: 1) direct communication over a communication link, and 2) "an omni-directional overhead channel" that may be used "for certain protocol exchanges that must occur with a potential neighbor node prior to the establishment of the directional link with that node." (Op. Br. at 14-15; '986 patent, 16:9-14.) This argument again inaccurately conflates "potential neighbor nodes" with the actual neighboring nodes required by the claims. Indeed, Stingray's cited except correctly distinguishes "neighbor nodes" that can directly communicate over a communications link from "potential neighbor nodes" between which a communications link has not yet been established. Neighboring mobile nodes are able to directly communicate over a single communication link. (See, e.g., '986 patent, 10:61-11:8, 14:44-48, 15:50-56.)

D. "routes"

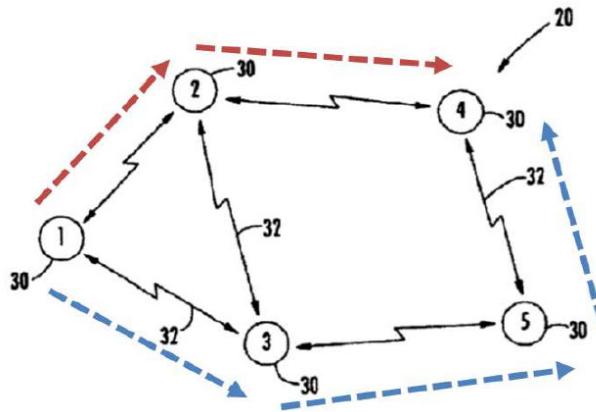
| Amazon Construction | Stingray Construction |
|----------------------------|---|
| Plain and ordinary meaning | one or more communication links between two nodes |

The term "routes" appears twice in claim 13 of the '310 patent. That claim is directed to "[a] method for routing message data from a source node to a destination node" with a plurality of "mobile nodes between the source node and the destination node" and "a plurality of wireless communication links connecting the nodes together." The recited method requires, among other things:

- . . . ranking discovered *routes* according to at least one link metric, and
- . . . simultaneously distributing the message data to the destination node along a plurality of the discovered *routes* based upon the ranking.

('310 patent, claim 13 (emphases added).) The plain meaning of a “route” is well-known; it is a path that a message data unit will traverse from a source node to a destination node. (Jeffay Decl. at ¶ 74; Miller Decl., Ex. 9, (Newton’s Telecom Dictionary (16th expanded and updated ed.)) at 731 (AMZ_STNGRY10103981) (defining “route” (singular) as “the path a message takes”).) Stingray does not appear to dispute this meaning. In its opening brief, it agrees that “a route consists of a path from a source node and a destination node” (Op. Br. at 16) and that “[t]he '310 patent uses the term ‘route’ to refer to a communication path between two nodes” (*id.* at 15).

Indeed, the specification confirms that the term “routes” refers to “paths” between source and destination nodes. It discloses that “the present invention provides the *discovery* and use of *multiple routes* with appropriate metrics for each to the destination” and these “[d]iscovered paths are ranked according to metric and/or traffic class.” ('310 patent, 6:48-54 (emphasis added).) With reference to Figure 1, reproduced below, the specification explains that “the source node 1 distributes the message data to the destination node 4 along the plurality of discovered routes, such as *routes 1-2-4 and 1-3-5-4.*” (*Id.* at 5:63-66 (emphasis added).)



('310 patent, Fig. 1 (red and blue dashed lines added).) Because source node 1 and destination node 4 are not directly connected by a communication link, data must traverse over other nodes to get from node 1 to node 4. A route marked in red traverses nodes 1, 2, and 4 and a route marked in blue traverses nodes 1, 3, 5, and 4. These nodes communicate with each other via

communication links, illustrated as the double arrow lines in the figure, which logically connect two nodes while they are communicating. Thus, while a route is a path that traverses nodes in a network to get from node A to node B, a link is a logical connection between two nodes, which exists only while the two nodes communicate. Consistent with the specification disclosure, a POSITA would know that routes are paths, each of which may traverse one or more links during network communication. (Jeffay Decl. at ¶ 81; '310 patent, 6:48-54, 5:63-66.)

While Stingray agrees that a route is a path (Op. Br. at 15-16), it maintains that the term “routes” should be construed not as paths, but as “one or more communication links.” Stingray’s proposal contradicts the ordinary meaning of “route” and “link,” the claim language, specification, and the prosecution history, and thus is improper as a matter of law.

First, the claim language recites both “routes” and “links.” Accordingly, and as described above, these two terms are distinct, and Stingray’s construction eliminates this distinction with no support in the intrinsic or extrinsic evidence. *Amgen Inc. v. Sandoz Inc.*, 923 F.3d 1023, 1031-32 (Fed. Cir. 2019) (“[o]ur precedent instructs that different claim terms are presumed to have different meanings”) (alteration in original) (quoting *Helmsderfer v. Bobrick Washroom Equip., Inc.*, 527 F.3d 1379, 1382 (Fed. Cir. 2008)).

Second, the claim term is “routes”—plural—and multiple routes cannot span a single “one” communication link, as Stingray’s construction suggests. While a single route could span a single communication link, multiple routes must span two or more links. Stingray’s construction attempts to rewrite the claim by replacing the plural “routes” with a singular “route.” There is no support for such a rewrite in the intrinsic or extrinsic record; indeed, Stingray cites none. *See, e.g., Mobile Telecomms. Techs., LLC v. T-Mobile USA, Inc.*, 78 F. Supp. 3d 634, 645 (E.D. Tex. 2015) (“in general the plural form of a noun refers to two or more”). To the contrary, during prosecution of the '310 patent—to overcome a rejection of the very claim 13—the patentee told the Patent

Office that the prior art “uses one route or another, but in no case does it uses [sic] *a plurality of routes.*” (Miller Decl., Ex. 1 (’310 File History, Nov. 3, 2004 Applicant Remarks) at 12 (STINGRAY IP_000338) (emphasis added).) In other words, to obtain allowance of claim 13, the patentee emphasized to the Patent Office that the claim language requires multiple “routes” and not a single route. And the patentee did so repeatedly, emphasizing to the Patent Office in another statement that the prior art “does not teach or suggest the use of *a plurality of routes* to distribute the message.” (*Id.* at 13 (STINGRAY IP_000339) (emphasis added).) Stingray’s rewrite of the claim now is improper.

It is also improper because it would eliminate recited claim requirements. *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 296 F.3d 1106, 1115 (Fed. Cir. 2002) (a construction is “improper” if it renders another term in the claim “meaningless”). The claim recites “ranking discovered routes” and “distributing the message data . . . along a plurality of the discovered routes.” Stingray’s proposed construction would violate this requirement by equating “routes” with a single “route.” And that Stingray is trying to rewrite the claim in this manner is apparent from its brief in which it repeatedly equates its proposed construction with a single “route,” while the claim requires multiple “routes.” (*See, e.g.*, Op. Br. at 16 (Stingray defining a “route” as “one or more communication links.”).)

Finally, Stingray’s construction is improper because it does not define the term “routes” but instead recites what routes may “consist” of. (Op. Br. at 16 (“Stingray’s construction clearly implies that each route consists of ‘one or more communication links,’ as explained above.”); *id.* (“A first route consists of only the single link between node 1 and node 2. A second route between nodes 1 and 2 would consist of the combined links between nodes 1 and 3 and between nodes 2 and 3.”); *id.* (“in the case where a route consists of a path from a source node and a destination node *with no intermediate node between them*, then the ‘route’ consists of only one link”) (emphasis in

original); *id.* at 17 (“In other examples, provided above, a route consists of multiple links.”).) Stingray does not dispute that a route is a path (*id.* at 15)—what that path consists of is not the meaning of the term “routes.”

Because Stingray’s construction contradicts the claim language, specification, and the prosecution history and it does not capture the plain and ordinary meaning of the term, it is improper.

E. “electrically separate wireless channels” and “electrically separate channels”

| Amazon Construction | Stingray Construction |
|---|--|
| [wireless] channels transmitting at different radio frequencies | channels separated electrically by different frequencies, or by time slots or codes (e.g., TDMA or CDMA) |

The terms “electrically separate wireless channels” and “electrically separate channels” appear in claims 1 and 18 of the ’426 patent, respectively. Channels are “electrically separate” when they transmit at different radio frequencies. (*See* Jeffay Decl. at ¶¶ 82-87.) Stingray agrees that channels separated by different frequencies are “electrically separate,” but incorrectly argues that 1) so are channels separated by “time slots or codes (e.g., TDMA or CDMA)” and 2) electrically separate channels do not “transmit.” Stingray’s arguments contradict the term’s plain and ordinary meaning and improperly enlarges the claim’s scope without support from the specification.

The specification does not use the term “electrically separate [wireless] channels,” but it does describe “channels” as connecting mobile nodes over “one or more radio frequenc[ies]” in a mobile ad hoc network. (’426 patent, 1:13-16 (“Physically, a mobile ad hoc network includes a number of geographically-distributed, potentially mobile nodes wirelessly connected by one or more radio frequency channels.”); *see also* *id.* at 7:12-20 (the network may “make use of the

ISM^[3] spectrum in the 5 GHz band”); Jeffay Decl. at ¶¶ 84-85 (the 5 GHz band includes channels separated by different radio frequencies).) As Stingray acknowledges, a person of ordinary skill in the art would therefore understand that “electrically separate” channels as used in the patent means “channels transmitting at different radio frequencies.” (See Jeffay Decl. at ¶¶ 84-85.) Amazon’s construction is correct.

Stingray’s construction is wrong because it states that channels separated “by time slots or codes (e.g., TDMA or CDMA)” are “electrically separate.”⁴ The specification never mentions TDMA or CDMA, let alone describes channels separated by time slots or codes such as TDMA or CDMA. And a POSITA would not consider the “electrically separate channels” to include time or code multiplexing. “TDMA” or “time division multiple access” refers to a method that allows multiple users to share a single communication link by each user transmitting data only during an assigned time slot. (Jeffay Decl. at ¶ 86.) “CDMA” or “code division multiple access” refers to a similar method that allows multiple users to send information over a single communication channel by combining and splitting (multiplexing) the information using a coding scheme. (*Id.*) TDMA separates a single channel by time, and CDMA separates a single channel by code. (*Id.*) Neither separates one channel from another nor does either *electrically* separate channels. (*Id.*) And again, neither is mentioned in the specification.

Stingray only points to the prosecution history—where the examiner correctly rejected applicants’ attempt to rewrite “electrically separate channels” as Stingray proposes now. Two

³ ISM is an industrial, scientific and medical network that uses a spectrum of radio frequency channels.

⁴ Stingray’s construction is also wrong because it reads out the “wireless” limitation recited in claim 1 of the ’426 patent and should be rejected for this reason as well. *Pause Tech., LLC v. TiVo, Inc.*, 419 F.3d 1326, 1334 (Fed. Cir. 2005) (“In construing claims, however, we must give each claim term the respect that it is due.”); *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 950 (Fed. Cir. 2006) (“claims are interpreted with an eye toward giving effect to all terms in the claim”).

years after filing its patent application, applicants amended the claim term “channels” to “electrically separate channels” and argued that they “amended the claims to set forth that the channels are electrically separate, such as by frequency, TDMA or CDMA, for example.” (Op. Br. at 18 (citing Miller Decl. Ex. 2 ('426 File History Aug. 5, 2004 Applicant Remarks) at 11 (STINGRAY IP_000893)) (original emphasis omitted).) But this purported definition is unsupported by the specification or the claims, and it is inconsistent with a POSITA’s understanding of how time or code multiplexing works. (Jeffay Decl., ¶ 86; *see* Miller Decl., Ex. 5 ('426 File History June 28, 2005 Final Office Action) at 14 (STINGRAY IP_000823) (the patent examiner rejected Stingray’s definition).) And a patentee cannot, as Stingray attempts to do here, use its statements in the prosecution history to “enlarge” or “vary” the limitations in the claims, contrary to the disclosure in the specification. *Chimie v. PPG Indus., Inc.*, 402 F.3d 1371, 1379 (Fed. Cir. 2005) (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995), aff’d, 517 U.S. 370 (1996)).

Stingray also argues that “[a] ‘channel’ does not transmit” but rather a transmitting device “transmit[s] on that channel.” (Op. Br. 18.) But this attorney argument is a red herring. Data is transmitted over channels in a network and the channels are transmitting that data; that is the only way data can travel from point A to point B in a network. The specification consistently so explains. (See, e.g., '426 patent, 2:32-36 (“Although some networks may use a separate control channel to reduce overhead on the *transmission channel*, conventional mobile ad-hoc networks do not *utilize multiple channels for transmitting packet data.*”) (emphases added).)⁵ When a device transmits data on two different channels, each channel is transmitting data at different radio

⁵ Amazon is amenable to a construction of “[wireless] channels *for* transmitting at different radio frequencies.”

frequencies. (See Jeffay Decl. at ¶¶ 84-85.) This is well-understood in the field and captured in Amazon’s proposed construction.

F. **“at each node, monitoring link performance on a first channel, link performance being based on at least one quality of service (QoS) threshold”**

“at each node, scouting one or more other available separate channels at different frequencies when the monitored link performance on the first channel falls below the QoS threshold”

| Amazon Construction | Stingray Construction |
|---------------------|-----------------------|
| Indefinite | Not Indefinite |

Claim 1 of the ’961 recites “monitoring link performance on a first channel, link performance being *based upon at least one quality of service (QoS) threshold*” and “at each node, scouting one or more other available separate channels at different frequencies when the monitored link performance on the first channel falls below *the QoS threshold*.” (’961 patent, claim 1 (emphasis added).) Neither the claim nor the patent provides objective boundaries for determining the meaning of these limitations, so they are indefinite. (Jeffay Decl., ¶ 89); *see Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1371 (Fed. Cir. 2014) (holding that for a term of degree the intrinsic record “must provide objective boundaries for those of skill in the art,” and unlike some pre-*Nautilus* cases have stated, merely identifying “some standard for measuring the scope” is not enough).

Although a POSITA would understand that QoS measures are performance measurements in computer networks, the POSITA would need guidance to determine what a “QoS threshold” might be or how it is determined. (Jeffay Decl. at ¶ 90.) Neither the claim nor the specification provides any guidance. (*Id.*) The specification expressly acknowledges that a variety of QoS measures exists, such as “bandwidth, error rate, end-to-end delay, end-to-end delay variation, hop count, expected path durability, and priority,” but it never describes how to determine the QoS

threshold for any one or more of those parameters. (*See id.* at ¶¶ 90-91 (quoting '961 patent, 3:1-15).) Thus, a POSITA is left to be the arbiter and make a subjective determination about which QoS parameter(s) to monitor and what threshold to set for those parameter(s). (*Id.* at ¶ 90.) The term is therefore indefinite. *Intell. Ventures I LLC v. T-Mobile USA, Inc.*, 902 F.3d 1372, 1381 (Fed. Cir. 2018).

Stingray argues that even though the specification provides no guidance as to how to set a QoS threshold, the claim is definite because the “the autonomy of a POSITA” will fill the gaps. (Op. Br. at 21.) Stingray further argues that it would be “simply unreasonable” to require the patent to provide guidance as to how to determine an appropriate threshold value for QoS measures because “[o]nly the implementer can determine the appropriate threshold based on the field of application and the desired services.” (*Id.*) In other words, Stingray argues that these terms should be *user defined* depending on what is important to the user in “the field of application and the desired services.” (*Id.*) The Federal Circuit has squarely rejected this argument. *See Intell. Ventures I*, 902 F.3d at 1381.

In *Intellectual Ventures I*, the Federal Circuit affirmed a ruling that the claim terms “QoS requirements” and “optimiz[ing] . . . QoS” are indefinite because they are “entirely subjective and user-defined.” *Id.* The specification in that case stated that the claim terms “QoS requirements” and “optimizing . . . QoS” are viewed on a “continuum, defined by what network performance characteristic is most *important to a particular user*,” and “[u]ltimately . . . the *end-user* experience is the final arbiter of QoS.” *Id.* (emphasis added.) Because the meaning of the terms necessarily depended on a subjective judgment of the “end user,” they were impermissibly subjective and indefinite. *Id.* The same analysis applies here, and Stingray’s reliance on the subjective determination of the end user cannot render this term definite. *Id.*

IV. AMAZON TIMELY DISCLOSED ITS EXPERT TESTIMONY

Stingray contends that “Amazon failed to timely disclose Dr. Kevin Jeffay as an expert it intends to rely on in these claim construction proceedings,” and accordingly requests that the Court “preclude Amazon from relying on his testimony. . . .” (Op. Br. at 4.) This contention lacks merit because there is no serious dispute that Amazon provided Stingray with adequate notice of its intent to rely on expert testimony and timely served Dr. Jeffay’s declaration as required by the Court’s Patent Rules.

On December 14, 2021, Amazon served its proposed claim constructions and extrinsic evidence as required by P.R. 4-2. (P.R. 4-2; Op. Br. at 4.) In that disclosure, Amazon stated that it would rely on expert testimony for claim construction. Indeed, Amazon’s P.R. 4-2 disclosure provided that Amazon “may rely upon one or more experts to testify regarding indefiniteness” of two terms⁶ and that the expert may also “testify regarding the proposed constructions or [] address constructions or arguments Plaintiff presents” including providing:

an explanation of the meaning of the identified claim terms in the context of the subject matter disclosed in the asserted patents, a description of the state of the technology relating to the alleged inventions claimed in the asserted patents, and how a person of ordinary skill in the art would interpret the identified claim terms at the time the applications of the asserted patents were filed.

(Ex. J to Op. Br. at 8; Op. Br. at 4-5.) Amazon did not identify Dr. Jeffay by name in this disclosure because it had not yet secured an expert engagement agreement with him. Stingray did not request that Amazon identify the expert by name, nor did it raise any other objection to the disclosure. On December 30, the parties conducted a conference of counsel as required by P.R. 4-2(c). (Miller Decl. at ¶ 2.) During that conference, held roughly a week before the P.R. 4-3 disclosures were

⁶ The two terms are “at each node, monitoring link performance on a first channel, link performance being based on at least one quality of service (QoS) threshold” and “at each node, scouting one or more other available separate channels at different frequencies when the monitored link performance on the first channel falls below the QoS threshold.” (Ex. J to Op. Br. at 7.)

due, Amazon identified its expert as Dr. Kevin Jeffay. (Miller Decl. at ¶ 2; Op. Br. at 5.) Counsel for Amazon also explained that Dr. Jeffay would opine on three additional claim terms in response to the claim construction positions Stingray disclosed for the first time on December 14. (Miller Decl. at ¶ 3; Op. Br. at 5.) On January 4, 2022, in accordance with P.R. 4-3, Amazon served a declaration of Dr. Jeffay. (Op. Br. at 5.) Stingray did not request to depose Dr. Jeffay then or at any point during the claim construction discovery period that closed on February 1, 2022.

Stingray does not dispute that Amazon’s disclosure of Dr. Jeffay’s declaration was timely and compliant with P.R. 4-3 (Op. Br. at 5); nor does Stingray dispute that Amazon’s other claim construction disclosures were timely (Op. Br. at 4). Yet Stingray argues that the Court should strike Dr. Jeffay’s declaration in its entirety because Amazon identified Dr. Jeffay’s *name* and three additional terms that he would opine on in response to Stingray’s disclosed claim construction positions between the P.R. 4-2 and P.R. 4-3 deadlines. (Op. Br. at 5.) Stingray’s argument fails. First, Amazon’s disclosure of Dr. Jeffay’s testimony was not untimely, so there is no basis to strike the declaration. Indeed, there is no dispute that Amazon provided Stingray notice of its intent to rely on expert testimony and timely served the declaration as required by the Court’s Patent Rules. Thus, Amazon provided disclosures “enabling the other side to prepare opposing expert testimony,” consistent with the “spirit” of Patent Rule 4. *See Am. Pats. v. Coolpad Grp.*, No. 4:19-cv-877, 2020 WL 5534482, at *3 (E.D. Tex. Sept. 15, 2020). Second, Stingray suffered no prejudice from any purportedly late disclosure. Amazon served Dr. Jeffay’s declaration along with its P.R. 4-3 disclosures, as the Rule requires, and disclosed him and each term he would opine on *before* serving the declaration. (Op. Br. at 5; Miller Decl. at ¶¶ 2-3.) Stingray had four weeks, pursuant to the Court’s scheduling order, between the P.R. 4-3 expert declaration deadline and the P.R. 4-4 claim construction discovery deadline to depose Dr. Jeffay but chose not to do so. (Dkt. 50.) Stingray had over six weeks under the case schedule to consider Dr. Jeffay’s declaration

and address it in its opening claim construction brief, which it did. (Dkt. 50; Op. Br. at 5.) Because Stingray has suffered no prejudice, and it failed to even identify any, Stingray’s request to strike should be denied. *Fractus, S.A. v. AT&T Mobility LLC*, Nos. 2:18-cv-00135, -00136, -00137, -00138-JRG, 2019 WL 5373021, at *2 (E.D. Tex. Mar. 19, 2019) (refusing to exclude a second expert declaration submitted *after* the 4-3 deadline because it was “unlikely that a party could credibly claim prejudice”).

And even if Stingray has suffered any prejudice—and it did not according to Stingray itself—its motion should be denied because Stingray had ample opportunity to challenge Dr. Jeffay’s declaration and cure any purported prejudice before serving its opening claim construction brief. Instead, Stingray inexcusably waited until its opening claim construction brief to raise any issue with Dr. Jeffay’s declaration with the Court. Stingray’s request to strike should be denied for this reason as well. *Realtime Data, LLC v. Rackspace US, Inc.*, No. 6:16-CV-00961 RWS-JDL, 2017 WL 1376621, at *2 (E.D. Tex. April. 17, 2017) (denying a motion to strike an expert declaration in part because the party had “ample opportunities to challenge” the P.R. 4-2 and P.R. 4-3 disclosures before opening claim construction briefs were filed); *Am. Pats. v. Coolpad Grp.*, 2020 WL 5534482, at *4 (denying a motion to strike an expert report where adequate time existed to cure any prejudice).

V. CONCLUSION

For the foregoing reasons, the Court should adopt Amazon’s proposed constructions and indefiniteness positions.

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Respectfully submitted,

By: /s/ Saina S. Shamilov

J. David Hadden

CA Bar No. 176148 (Admitted E.D. Tex.)

Email: dhadden@fenwick.com

Saina S. Shamilov

CA Bar No. 215636 (Admitted E.D. Tex.)

Email: sshamilov@fenwick.com

Ravi R. Ranganath

CA Bar No. 272981 (Admitted E.D. Tex.)

Email: rranganath@fenwick.com

FENWICK & WEST LLP

801 California Street

Mountain View, CA 94041

Telephone: (650) 988-8500

Facsimile: (650) 938-5200

Geoffrey R. Miller

(Texas State Bar No. 24094847)

Email: gmiller@fenwick.com

FENWICK & WEST LLP

902 Broadway, Suite 14

New York, NY 10010

Telephone: 212.430.2600

Facsimile: 650.938.5200

Min Wu

CA Bar No. 307512 (Admitted E.D. Tex.)

Email: min.wu@fenwick.com

FENWICK & WEST LLP

555 California Street, 12th Floor

San Francisco, CA 94104

Telephone: 415.281.1350

Facsimile: 415.281.1350

Deron R. Dacus

(Texas State Bar No. 00790553)

Email: ddacus@dacusfirm.com

THE DACUS FIRM, P.C.

821 ESE Loop 323. Suite 430

Tyler, TX 75701

Telephone: 903.705.1117

Facsimile: 903.581.2543

Counsel for Defendants

AMAZON.COM, INC., AND

AMAZON.COM SERVICES LLC,

CERTIFICATE OF SERVICE

The undersigned certifies that on March 1, 2022 all counsel of record who have consented to electronic service are being served with a copy of this document via electronic mail.

/s/ Saina S. Shamilov
Saina S. Shamilov